

## Claims

1. Loading structure comprising a fluid transfer boom for transfer of liquid hydrocarbons from a first storage structure to a vessel, the boom having a first arm and a second arm which are mutually connected at a first end via a first swivel joint to be rotatable around an axis perpendicular to the plane defined by the centre lines of the arms, the first and second arms being with a second end connected to the storage structure and connectable to the vessel respectively, via at least two swivel joints each, to be able to rotate around an axis in the plane of the centre lines and around an axis perpendicular to the centre line, the arms comprising at least seven swivel joints in total located near the first and second ends of the arms, each arm being rotatable around three perpendicular axes, the first arm suspended from the storage structure in a generally vertical direction, wherein the second arm can extend between the first end of the first arm and the vessel in a generally horizontal direction.

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2. Loading structure according to claim 1, wherein the swivel joints are of substantially similar construction.

3. Loading structure according to claim 1, wherein the first and second arms comprise at their first end and/or second end substantially similar, generally u-shaped piping structures comprising, relative to the centre line of the arms, a 90° bend and connected thereto a 180° bend.

4. Loading structure according to claim 1, wherein the arms each comprise a substantially similar mid section comprising on one end a fixed flange and on the other end a substantially similar swivel joint.

5. Loading structure according to claim 1, comprising a support arm carrying the transfer boom and being connected at an end part to the second end of the second arm for rotating the second arm towards the first arm and being connected with an intermediate part that is spaced away from the end part, to the first end of the arms for rotating the first arm towards the support arm.

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6. Loading structure according to claim 1, wherein a counterweight is connected to the first end of the arms.